

ABSTRACT

A nano impression lithographic process which involves the use of a die having a region able to generate heat

A lithographic process for forming a pattern in relief (20) on a mass (10) of polymeric material comprises the steps of: preparing the mass (10) of polymeric material and a die (12) having a surface region (14) facing towards the mass (10) of polymeric material and which reproduces in negative the pattern in relief (20); heating the die (12) and putting the mass (10) of polymeric material into contact with the die (12) in any temporal sequence, in such a way that the part of the mass (10) of polymeric material in contact with the surface zone (14) is subject to softening; and separating the die (12) from the mass (10) of polymeric material on the surface of which the pattern in relief (20) has been formed. The heating of at least one part of the die (12) is obtained by generation of thermal energy upon dissipation of another form of energy in at least one region (16) of the die (12).

(figure 1C)